

DOCUMENT RESUME

ED 331 723

SE 052 037

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TITLE Another Pair of Eyes: On The Reflectiveness of the
Ethnographic Observation of a Science Teacher.
SPONS AGENCY Martha Holden Jennings Foundation, Cleveland, Ohio.;
National Science Foundation, Washington, D.C.
PUB DATE 91
NOTE 12p.; Paper presented at the Annual Meeting of the
National Association for Research in Science Teaching
(Lake Geneva, WI, April 7-10, 1991).
PUB TYPE Speeches/Conference Papers (150) -- Reports -
Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Ethnography; Junior High Schools; Qualitative
Research; Science Education; *Science Teachers;
*Teacher Attitudes; *Teacher Characteristics;
*Teaching Methods
IDENTIFIERS Toledo Support Teachers Program OH

ABSTRACT

As part of a major effort towards the documentation of teachers' roles, in a project (Toledo Support Teachers Program) aimed towards their restructuring, one female science teacher was observed using ethnographic techniques while performing her daily work as a teacher, department head, support teacher during the winter and spring of 1989. The technique used is called "shadowing", since both the observer and the subject were together for a long time each day. Jointly written by the observer and the teacher, this paper attempts to analyze the technique both as a research tool and as a medium for the teacher's critical examination of her practices. The paper addresses in detail the description of the technique used, the teacher's reaction to the observation, and post-observation effects on the teacher's practices. (Author/CRW)

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ANOTHER PAIR OF EYES:

**ON THE REFLECTIVENESS OF THE
ETHNOGRAPHIC OBSERVATION
OF A SCIENCE TEACHER**

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Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, Lake Geneva, WI, April 7 - 10, 1991. The research presented has been supported by the Institute for Research on Teaching and grants from the National Science Foundation, the Martha Holden Jennings Foundation, and the Toledo Community Foundation. We also acknowledge the cooperation of the American Federation of Teachers, the Toledo Public Schools and the College of Education at Michigan State University. The opinions expressed in this paper do not necessarily reflect the position, policy, or endorsement of any of the organizations referred above

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**ANOTHER PAIR OF EYES:
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OF A SCIENCE TEACHER**

Lucy Vernile

and

Roberto Monteiro

Abstract

As part of a major effort towards the documentation of teachers' roles, in a project aimed towards their restructuring, one female science teacher was observed using ethnographic techniques performing her daily work as a teacher, department head and support teacher during the winter and spring of 1989. The technique used was named "shadowing" since both observer and subject were together for long time each day. Jointly written by the observer and the teacher this paper attempts to analyze the technique both as a research tool and as a mediator of the teacher's critical examination of her practices. The paper addresses in detail the description of the technique used, the teacher's reaction to the observation, and post observation effects on the teacher's practices.

I. INTRODUCTION

This paper has grown out of a reflection about the doing of ethnographic observation within the context of a larger program in order to collect data for the assessment of its impact. It is, also, a reflection about the effects of the observation process both upon the researcher doing it and the observed subject.

The history of the Science and Mathematics Support Program, hereafter referred to as "Support Teacher Program" within which the issues addressed in this paper are contextualized will not be told here. Readers interested in knowing this paper's major background may go to other sources (Bettencourt & Gallagher 1989,1990; Gallagher 1989 Zesaguli 1990). Other related papers being presented in this same meeting, also address some historical account of the program (Bettencourt 1991).

Methodological issues arising from the doing of teacher's observation in the way reported here will be the main focus of the paper. More specifically, two aspects will be considered: 1) observation as a research tool and, 2) observation as a mediator of teachers' critical examination of his/her practices. The paper will be divided into three sections. The first is an attempt at describing how the observation was negotiated and developed. The second will cover the teachers' reactions. The third will conclude the paper with consideration about the effects of the observation focusing on the issue of its reflectiveness. The paper is jointly written by observer and observed and will certainly reflect this characteristic in the text.

II- OBSERVING LUCY, BECOMING HER SHADOW

Observing Lucy, and the other teachers participating in the "Support Teacher Program", was a process conducted to assess the appropriateness of the program's course of action. It was developed under the rationale that the program's staff needed independently collected data for that assessment. As a result of that rationale Lucy and I end up involved in a process that could be described as a "focused interaction" or "encounter", according to Goffman's conceptualization.

Focused interaction occurs when people effectively agree to sustain for a time a single focus of cognitive and visual attention, as in a conversation, a board game, or a joint task sustained by a close face-to-face circle of contributors. ... I call the natural unit of social organization in which

focused interaction occurs a focused gathering, or an encounter, or a situated activity system (Goffman, 1961).

Lucy's appraisal of that process is an important piece of reasoning. It helps to understand the extent of internal transformation a person has to undergo in order to open up, her professional life to outside scrutiny, as she did.

I believe, that if given a choice, most teachers would prefer to teach in isolation - where they could close their doors and do what they wish to without concerning themselves about whether or not another person would approve or disapprove, appreciate or dislike that which is happening in his/her classroom. I liked the isolation. Basically I am a shy person. (Research Doc. # 113) p. 6. ⁽¹⁾

As a participant in the "Support Teacher Program" she had already to move away of her previous professional isolation, a great deal. However, due to the decision to assess the impact of the program, Lucy and the other "support teachers" had yet go further away from the comfort of closed doors.

That's no problem. You can come whenever you wish to do your job. [observe her] I am already used to the MSU people sitting in my class. We will do it you will see...

The rationale for having me and Lucy together was presented to both of us by the staff of the "Support Teacher Program" in a meeting designed to introduce observers and observed. Prior to that the observers only had a separate meeting where techniques, schedules and other details were discussed. This rationale was stated as follows:

To document the impact of the support teachers program on the teaching and learning of Junior High School Science (Research Doc. # 113) p. 6.

The "Support Teacher Program", therefore, sets the context for the issues to be expressed in this paper. The program is being developed since 1987 in a midwestern medium sized American city. This ongoing program aims at restructuring the role of science and mathematics teachers within selected buildings of the same school district. The most apparent expected result of the program is the implementation of a new professional role: the support teacher role. This result is in many ways aligned with

(1) All documents referred to in this paper are part of MSU/AFT/TPS Document Collection. This is a private collection with restricted access, housed in the College of Education, Michigan State University, under the responsibility of James J. Gallagher and Perry Lanier

recent reports on the situation of American schools. In those reports, the need for better prepared, supported and appreciated teachers and the need for leading teachers at building level were made clear (Carnegie Forum, 1986; Holmes Group, 1986). Those guidelines found a receptive school system and a supportive Union which made possible for the program to be developed.

The means to achieve restructuring have been in-service training of teachers, done in a systematic way, coupled with "in-loco" technical assistance and support. Both in-servicing and assistance are organized by a project staff from MSU - College of Education. Described in that way the program may show similarities with lots of others developed recently or in past years. However, this program has some distinctive characteristics:

- a) it represents a long term commitment of a group of college level science and mathematics' researchers and science and mathematics' teachers to a joint venture of problem solving at building level;
- b) it involves a comprehensive participation of the teachers in the different stages of the program's course of actions;
- c) it evolves around a progressively "shared" vision of science and mathematics teaching expected to become gradually incorporated into the building teaching culture.

Those characteristics were the ones justifying, as well as making possible, the recognition that ethnographic observation would have better grasp at the kind of data needed. Main stream techniques of data collection were never entirely ruled out, but for the assessment of the program they were not privileged. Two reasons might have influenced that decision and provided technical justification for gathering data ethnographically: 1) the consideration that surveys or structured interviews would be too much intrusive given the setting to be understood (Webb, Campbell, Schwartz, & Sechrist 1966). 2) the kind of data to be collected. As suggested by Gallagher (1989), the examination of what teachers believe and how they incorporate it into their practices is the basis upon which attempts to restructuring science teaching should be done. The statement next comes from the documentation of the meetings in preparation to start the observations. It was made by one of the senior researchers and indicates that consideration was given to Gallagher's conception, about the kind of data needed.

I think that one of the crucial elements of this documentation is how this "support teachers program" is affecting the climate of the schools. And I don't think they [the teachers] will tell that too easily... (Audio Tape # 0099)

One must consider, however, that, as a course of action, the project reached a reputation of acknowledging the importance of teachers participation at all levels. It was this recognition that teachers contribution would be valuable to assess the program that made it definitive the choice of an ethnographic kind of observation.

The observation that ended up being put into practice was done in three different sets of whole weeks - whole day constant companionship between I, as observer, and Lucy as the observed teacher. Due to this long companionship the process was called "shadowing". I came to be known as "shadow" as this nickname was applied to me in occasions when I was introduced to other people in the building.

This shadowing experience had many similarities with those described by qualitative researchers doing long term observation in school settings, particularly the following one where the term "shadow" was used by the first time.

Before extending my invitation to Ed to participate in the study I reviewed the kinds of activities I intended to pursue with him as a "shadow": maintaining a constant written record of what I observed in behavior and conversations; attending formal and informal meetings and conferences; accompany him on school business away from the building as well as occasionally accompany him in non school settings; interviewing "everybody"; and, with his permission sifting through notes, records and files. Wolcott, (1973).

III. OBSERVING LUCY, MORE STEPS AWAY FROM ISOLATION

As we talk now after being together for so many time the issues that come to mind are two fold. The real meaning of participating in the "Support Teachers Program" on one hand. On the other hand our changing reactions to our togetherness during the observation process.

I remember the first class I observed. We were both feeling anxiety and nervousness, feelings that we can share now, but were trying to control by the time we were negotiating the observation.

I have been anxious about the responsibility of the work I was supposed to do. I was expected to be an independent observer. In that capacity I would provide independently collected data to the program's

staff due to the fact that I was not a participant in the program. Indeed I was bringing to the task five years of experience in similar programs in another country. However, that was no comfort for me because I had to confront tremendous barriers arising from my unfamiliarity with the American school system.

Lucy was once more confronted with, as well as questioning it, the issue of isolation. She now talks about her comfortable position in the past, before starting her participation in the program. "I knew I was doing a good job. My principal was happy and my parents were satisfied with the job I was doing". However, she was confronted with the reality of having to be observed. She talked about this experience once and she expressed her feelings using as metaphor something she knows quite well, being a science teacher. "I feel like I am under the lenses of a microscope," she said when we reached half of our time of observation. As we discuss this issue now, in an "ex post facto" manner, she recognizes that the observation has not been intended as an evaluative process. She shows, however, how evaluative it can be from the perspective of the person being observed. She told me recently:

Because of this isolation, this [the observation time] then becomes the first time that the teacher will get some sense of whether he or she is any good or not. Very good teachers are many times as anxious as very poor ones. And some who, by our standards, aren't very skilled are quite comfortable (Research Doc. # 129) p. 1.

In another opportunity by the end of the observation process she made an examination of the kind of transformations she had experienced in understanding her participation on the program.

When I first heard about the project, the idea was- and if memory serves me correctly - it was that we have a program that's going to help improve the student's learning if we want to participate. We had no idea just what it was going to involve, what it was going to entail. Most of us thought we were getting involved in something that was going to have a direct effect on the students. As we got into the program more and more and more, it wasn't - the ultimate aim was a direct affect of the students - but the change had to come from the teachers (Audio Tape # 117).

I remember us talking by the end of the first of her classes that I observed. She commented about the noise the kids were doing as she was doing one of her first attempts at having the students doing group work. She was giving me valuable information to understand what I observed before and also explaining her frustration with the kids behavior in that particular class. It was from that conversation that came the expression

that became the keystone of our encounter. As I tried to tell her that my observation was not evaluative I said:

The kids were doing OK in the groups I observed. Their noise was resulting of their excitement with the explanations they were dealing with. [And concluded, kind of justifying my presence in the classroom]. See ? sometimes is good to have someone observing your teaching. It is like having another pair of eyes, that helps teachers see what is going on (Field notes collected in the winter of 1989).

That metaphor describing my role as observer made us both more comfortable in our respective roles. Me as shadow and she as teacher. This is her account of that circumstance.

So after I was able to get over my stage fright, I then had to be very careful not to plan to do anything special or different from that which I normally would have done. Now, again this is very difficult, because one naturally wants to look his best at all times but I made a conscious effort to be "business as usual". This was also difficult for some of my students because, many times, they wanted "to put on a show" for our guest. (Research Doc. # 129) p. 2.

But as we will report in the next section the metaphor suggests, and we experienced it, the existence of a great deal of reflectiveness embedded in the process of observation.

III. CONCLUSION

It took a while, but eventually, both the students and Lucy accepted my presence as documenter to the point of ignoring me. However, as we came to understand now, my presence brought to her, sometimes, the need to explain to herself aspects of her teaching practice that would have passed unnoticed otherwise. She started a mechanism of scrutinizing her practice with herself in a process where I, as an observer, functioned as a mirror.

The phenomenon described before seems to be one where Lucy was scrutinizing her practice both "reflectively" and "reflexively" (Court, 1988; Hills & Gibson, 1988). Addressing this issue seems to be important because despite the phenomenon of reflectiveness being an acknowledged aspect of every ethnographic observation is not common to have both the researcher and the subject talking about that, as we are doing in this paper.

During the negotiation of my entry into Lucy's working place I made every possible effort to assure her of a non judgmental position. By

that I meant not to hold any expression of value judgement that would prevent me from understanding what was going on from her perspective. As she indicated to me in more than one occasion she was not completely satisfied with some aspects of her teaching practice. This makes it impossible to determine whether the process of observation itself or her previous dissatisfaction has caused her to scrutinize her practice. The empirical evidence we have only authorizes us to say that her scrutiny was more intense during the time she was observed. She acknowledges now that some of that scrutiny was actually done, sometimes, when she was under the impression that I was developing an opinion about her teaching practice. What I was consciously striving to do was to observe her in order to be able to describe her way of participating in the Support Teaching Program.

What we have learned from our experience seems to be relevant for understanding the implications of doing ethnographic observations of teachers within the realm of research/intervention projects. The apparent duality represented by the reflective/reflexive aspects exposed by the observation must be recognized and interpreted. Going to a dictionary won't help since the two words do not seem to have a great deal of difference in their meaning (Simpson and Weiner, 1989, pp. 470-477). Our experience seems to demonstrate that the mirroring, which is the back and forth movement of meanings between an observer and observed, complements the mental process of Lucy's self scrutiny of her own practice. For those interested in the craft of ethnographic research what we learned clearly confirm the reflexive character assumed by research involving social settings (Hammersley and Atkinson, 1983). Therefore, researchers must recognize the intervention aspect of their research endeavors.

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